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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A substantially pure polypeptide comprising an amino acid sequence at least 90% identical to SEQ ID NO:2, wherein the polypeptide induces differentiation of an osteoblast ~~osteocyte~~.

2-4. (Canceled)

7. (Original) A substantially pure polypeptide comprising SEQ ID NO:2.

11. (Previously Presented) A substantially pure polypeptide comprising SEQ ID NO:1.

15. (Currently Amended) A substantially pure polypeptide comprising the amino acid sequence of SEQ ID NO:2 containing up to 30 conservative amino acid substitutions, wherein the polypeptide induces differentiation of an osteoblast ~~osteocyte~~.

22. (Currently Amended) A substantially pure polypeptide encoded by a first nucleic acid that hybridizes under stringent conditions (0.2 X SSC and 0.1% SDS at 68°C) to a second nucleic acid consisting of SEQ ID NO:3, wherein the polypeptide induces differentiation of an osteoblast ~~osteocyte~~.

9-40. (Canceled)

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15  
16 41. (Previously Presented) The polypeptide of claim 1, wherein the amino acid sequence contains up to 15 conservative amino acid substitutions.

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17 42. (Previously Presented) The polypeptide of claim 1, wherein the amino acid sequence contains up to 5 conservative amino acid substitutions.

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18 43. (Previously Presented) The polypeptide of claim 1, wherein the amino acid sequence contains up to 3 conservative amino acid substitutions.

2 44. (Previously Presented) The polypeptide of claim 1, wherein the amino acid sequence is at least 95% identical to SEQ ID NO:2.

3 45. (Previously Presented) The polypeptide of claim 1, wherein the amino acid sequence is at least 99% identical to SEQ ID NO:2.

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26 46. (Previously Presented) A substantially pure polypeptide consisting of the sequence of SEQ ID NO:1.

27 47. (Previously Presented) A substantially pure polypeptide consisting of the sequence of SEQ ID NO:2.

4 48. (Previously Presented) A method of screening for a compound that binds to a polypeptide, the method comprising:

- providing the polypeptide of claim 1;
  - contacting a test compound with the polypeptide; and
  - determining whether the test compound has bound to the polypeptide.
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~~8~~ 49. (Previously Presented) A method of screening for a compound that binds to a polypeptide, the method comprising: ~~7~~  
providing the polypeptide of claim ~~5~~;  
contacting a test compound with the polypeptide; and  
determining whether the test compound has bound to the polypeptide.

~~12~~ 50. (Previously Presented) A method of screening for a compound that binds to a polypeptide, the method comprising: ~~11~~  
providing the polypeptide of claim ~~6~~;  
contacting a test compound with the polypeptide; and  
determining whether the test compound has bound to the polypeptide.

~~19~~ 51. (Previously Presented) A method of screening for a compound that binds to a polypeptide, the method comprising: ~~15~~  
providing the polypeptide of claim ~~7~~;  
contacting a test compound with the polypeptide; and  
determining whether the test compound has bound to the polypeptide.

~~23~~ 52. (Previously Presented) A method of screening for a compound that binds to a polypeptide, the method comprising: ~~22~~  
providing the polypeptide of claim ~~8~~;  
contacting a test compound with the polypeptide; and  
determining whether the test compound has bound to the polypeptide.

~~5~~ 53. (Currently Amended) A method of screening for a compound that induces ~~osteocyte~~ osteoblast differentiation, the method comprising:  
culturing osteoblasts;  
providing the polypeptide of claim 1 to said osteoblasts;

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contacting a test compound with the polypeptide;  
measuring osteoblast differentiation; and  
selecting a test compound that increases the ability of the polypeptide to induce ~~osteocyte~~  
differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in  
the absence of the test compound.

9/54. (Currently Amended) A method of screening for a compound that induces  
~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>7</sup> ~~5~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that increases the ability of the polypeptide to induce ~~osteocyte~~  
differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in  
the absence of the test compound.

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13/55. (Currently Amended) A method of screening for a compound that induces  
~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>11</sup> ~~6~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that increases the ability of the polypeptide to induce ~~osteocyte~~  
differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in  
the absence of the test compound.

20/56. (Currently Amended) A method of screening for a compound that induces  
~~osteocyte~~ osteoblast differentiation, the method comprising:

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culturing osteoblasts;

providing the polypeptide of claim <sup>15</sup> ~~7~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that increases the ability of the polypeptide to induce ~~osteocyte~~ differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in the absence of the test compound.

<sup>24</sup> ~~57~~. (Currently Amended) A method of screening for a compound that induces ~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>22</sup> ~~8~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

<sup>D</sup> selecting a test compound that increases the ability of the polypeptide to induce ~~osteocyte~~ differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in the absence of the test compound.

<sup>6</sup> ~~58~~. (Currently Amended) A method of screening for a compound that inhibits ~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim 1 to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that reduces the ability of the polypeptide to induce ~~osteocyte~~ differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in the absence of the test compound.

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10 59. (Currently Amended) A method of screening for a compound that inhibits ~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>7</sup> ~~8~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that reduces the ability of the polypeptide to induce ~~osteocyte~~ differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in the absence of the test compound.

14 60. (Currently Amended) A method of screening for a compound that inhibits ~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>11</sup> ~~6~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that reduces the ability of the polypeptide to induce ~~osteocyte~~ differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in the absence of the test compound.

21 61. (Currently Amended) A method of screening for a compound that inhibits ~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim <sup>15</sup> ~~7~~ to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

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selecting a test compound that reduces the ability of the polypeptide to induce ~~osteocyte~~  
differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in  
the absence of the test compound.

*25* *22* (Currently Amended) A method of screening for a compound that inhibits  
~~osteocyte~~ osteoblast differentiation, the method comprising:

culturing osteoblasts;

providing the polypeptide of claim 8 to said osteoblasts;

contacting a test compound with the polypeptide;

measuring osteoblast differentiation; and

selecting a test compound that reduces the ability of the polypeptide to induce ~~osteocyte~~  
differentiation compared to the ability of the polypeptide to induce ~~osteocyte~~ differentiation in  
the absence of the test compound.

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